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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,989	01/19/2002	Curtis Gregory Kelsay	10017364-1	5126

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EXAMINER	
WORKU, NEGUSSIE	

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/053,989	KELSAY, CURTIS GREGORY	
	Examiner	Art Unit	
	Negussie Worku	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 January 2002* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Negussie Worku
9/29/05

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-28 is rejected under 35 U.S.C. 102(b) as being anticipated by Natori (USP 4908717).

With respect to claim 1, Natori teaches an optical scanning apparatus (image scanner of fig 2) comprising: a scanner body (scanner 1 of fig 4); and a self-propelled light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) supported within the scanner body (scanner 1 of fig 4, col.5, lines 29-35).

With respect to claim 2, Natori teaches an optical scanning apparatus (image scanner of fig 2), and further comprising a platen supported by the scanner body, (scanner 1 of fig 4) and wherein the self-propelled light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) a drive wheel (gear 23 of fig 3) in contact with a drive track (guide rail 7 and 8) defined on the platen (platen 4 of fig 3) to allow the drive wheel to drive the light bar assembly (light source

unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) along the platen (platen 4 of fig 4).

With respect to claim 3, Natori teaches an optical scanning apparatus (image scanner of fig 2), and further comprising a drive track (guide rail 7 and 8) supported within the scanner body, (scanner 1 of fig 2), and wherein the self-propelled light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) comprises a drive wheel (gear 23 of fig 3) in contact with the drive track (guide rail 7 and 8 of fig 4) to allow the drive wheel to propel the light bar assembly with respect to the scanner body (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 4, Natori teaches an optical scanning apparatus (image scanner of fig 2), and further comprising a platen (platen 4 of fig 4) supported by the scanner body (scanner 1 of fig 1) and having a first edge, and wherein the drive track (the guide rail means 7 and 8 of fig 4), is positioned adjacent to the first edge of the platen (platen 4 of fig 1).

With respect to claim 5, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) comprises a biasing member configured to urge the drive wheel (gear 23 of fig 3) towards the drive track (guide rail

means 7 and 8 of fig 4).

With respect to claim 6, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4), is supported within the scanner body by the drive track (guide rail 7 and 8 of fig 4).

With respect to claim 7, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the drive wheel (gear 23 of fig 3) includes a rubberized outer portion, and the drive track (7 and 8 of fig 4) has a non-smooth surface to allow the rubberized outer portion of the drive wheel to engage the drive track (7 and 8 of fig 4).

With respect to claim 8, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein: the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4), is defined by a first end and a second end; the drive wheel is a first drive wheel, (gear 23 of fig 3) the drive track (7 of fig 4) is a first drive track, and the first drive wheel (gear 23 of fig 4) is supported proximate the first end of the light bar assembly, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4); the optical scanning apparatus (fig 3) further comprising: a second drive track (8 of fig 3) supported within the scanner body (1 of fig 3); and a second drive wheel (24 of fig 3) supported proximate the second end of the light bar assembly (light source unit 10 of fig 4, to moves parallel

along the guide rail means 7 and 8 of fig 4), and in contact with the second drive track (8 of fig 3).

With respect to claim 9, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) comprises a rotary electric motor (drive motor 24 of fig 3) configured to propel the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 10, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly comprises a linear electric motor configured to propel the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 11, Natori teaches an optical scanning apparatus (image scanner of fig 2), a scanner body (1 of fig 1); a light bar assembly supported within the scanner body, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4), the light bar assembly comprising a drive motor, (drive motor 24 of fig 3), a drive wheel (gear 23 of fig 3) driven by the drive motor (drive motor 24 of fig 3), and wherein the drive wheel (gear 23 of fig 3) is in contact with a drive surface defined within the scanner body (scanner 1 of fig 1) to allow the drive wheel (gear 23 of fig 3) to drive the light bar assembly on the drive surface relative to the scanner body (light

source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 12, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the scanner body (scanner 1 of fig 3), defines an inside upper surface, and wherein the drive wheel (gear 23 of fig 3) contacts the inside upper surface of the scanner body (scanner 1 of fig 1).

With respect to claim 13, Natori teaches an optical scanning apparatus (image scanner of fig 2), and further comprising a support surface (platen 4 of fig 3) within the scanner body, (scanner 1 of fig 3) upon which the light bar assembly (10 of fig 1) is supported, and wherein the light bar assembly further comprises support wheels which rest on the support surface, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 14, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly further comprises biasing members which support the support wheels on the light bar assembly, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4), and wherein the biasing members urge the support wheels against the support surface, and thereby urge the drive wheel (gear 23 of fig 3) against the drive surface.

With respect to claim 15, Natori teaches an optical scanning apparatus (image

scanner of fig 2), and further comprising a position detecting system to allow the detection of the position of the light bar assembly with respect to the scanner body, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 16, Natori teaches an optical scanning apparatus (image scanner of fig 2), comprising: a scanner body (scanner 1 of fig 1); a magnet-track portion of a linear electric motor (driving motor 24 of fig 4) fixedly supported within the scanner body 91 of fig 1); a light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4); and wherein the light bar assembly (10 of fig 1) is supported in the scanner body to place the magnet-track portion in proximity to the slider portion to thereby allow the light bar assembly to be driven along the magnet-track portion (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 17, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly is suspended from the magnet-track portion (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 18, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly rests on top of the magnet-track portion, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and

8 of fig 4).

With respect to claim 19, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the light bar assembly rests on a support surface defined within the scanner body such that the slider-portion and the magnetic-track portions are not in direct contact with one another, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 20, Natori teaches an optical scanning apparatus (image scanner of fig 2), and further comprising a position detecting system to allow the detection of the position of the light bar assembly with respect to the scanner body (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 21, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein the position detecting system comprises: a linear encoding strip supported within the scanner body and mounted parallel to the magnet-track portion; and a sensor supported by the light bar assembly and configured to detected the linear encoding strip, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 22, Natori teaches an optical scanning apparatus (image scanner of fig 2), and wherein: the light bar assembly (light source unit 10 of fig 4, to

moves parallel along the guide rail means 7 and 8 of fig 4), is defined by a first end and a second end; the drive wheel is a first drive wheel, (gear 23 of fig 3) the drive track (7 of fig 4) is a first drive track, and the first drive wheel (gear 23 of fig 4) is supported proximate the first end of the light bar assembly, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4); the optical scanning apparatus (fig 3) further comprising: a second drive track (8 of fig 3) supported within the scanner body (1 of fig 3); and a second drive wheel (24 of fig 3) supported proximate the second end of the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4), and in contact with the second drive track (8 of fig 3).

With respect to claim 23, Natori teaches a method of moving a light bar assembly within a scanner body of an optical scanning apparatus (image scanner of fig 2), comprising: providing a stationary track (7 and 8 of fig 3) within the scanner body (1 of fig 1); providing a motive source supported by the light bar assembly (10 of fig 1); and moving the light bar assembly along the stationary track using the motive source, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 24, Natori teaches the method, and wherein the light bar assembly is moved to a plurality of positions along the stationary track, (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4), the method further comprising determining the position of the light bar assembly as it is moved

along the stationary track (guide rail 7 and 8 of fig 3).

With respect to claim 25, Natori teaches the method, and further comprising urging the light bar assembly against the stationary track while moving the light bar assembly along the stationary track (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 26, Natori teaches an optical scanning apparatus (image scanner of fig 2) comprising: a scanner body (scanner 1 of fig 4); and a self-propelled light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) supported within the scanner body (scanner 1 of fig 4, col.5, lines 29-35), configured to be used in an optical scanning apparatus (1 of fig 3).

With respect to claim 27, Natori teaches the self-propelled light bar assembly, (fig 10 of fig 1), and wherein the light bar assembly (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4) comprises a rotary electrical motor (25 of fig 1) supported within the light bar assembly and configured to engage a drive surface within the optical scanning apparatus (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

With respect to claim 28, Natori teaches the self-propelled light bar assembly, (fig 10 of fig 1), and wherein the light bar assembly comprises a slider-portion of a linear

electrical motor (25 of fig 3) fixedly supported by the light bar assembly and configured to cooperatively engage a static portion of a linear motor which is fixedly supported within the optical scanning apparatus (light source unit 10 of fig 4, to moves parallel along the guide rail means 7 and 8 of fig 4).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

Negussie Worku

09/29/05